

REMARKS

Applicant thanks the Examiner for carefully reviewing the application. Please reconsider this application in view of the above amendments and the following remarks.

Disposition of the Claims

Claims 1-15 were pending. The Examiner withdrew claims 1-5, 8-9, and 11-15 as being directed to non-elected subject matter. Applicant respectfully notes that claim 11 depends from claim 7 and is directed to the same subject matter as those in claims 6-7 and 10. In addition, claims 8 and 9 also depend, directly or indirectly, from claim 6 and recite methods for using the compositions of claim 6. Under 37 C.F.R. § 1.475(b)(2), unity of invention is found for products and methods of using the products.

Furthermore, "[u]nity of invention has to be considered in the first place only in relation to the independent claims in an international application and not the dependent claims. . . . If the independent claims avoid the prior art and satisfy the requirement of unity of invention, no problem of lack of unity arises in respect of any claims that depend on the independent claims." MPEP § 1850. Thus, it is improper for the Examiner to require restriction of the dependent claims.

New claims 16-18 have been added. Accordingly, the pending claims should include claims 6-11, and 16-18. Claim 6 is independent. Claims 7-11, and 16-18 depend, directly or indirectly, from claim 6.

Amendment to the Claims

Claims 6-7 and 10-11 been amended to clarify the inventions recited. New claims 16-18 have been added. Support for these amendments, for example, can be found on p. 5, lines 25-31 and p. 7, lines 18-20. No new matter is introduced by this amendment.

Amendment to the Specification

The Specification has been amended by adding a first paragraph claiming priority to the prior filed application.

In addition, several paragraphs have been amended to correct typographic errors. The description of an antisense polynucleotide as having a length of 15-625 ~~bp~~ is clearly incorrect. It should be 15-625 bases. One of ordinary skill in the art would appreciate that this is a simple typographic error. In addition, on page 5, lines 25-32, the lengths of antisense polynucleotides are properly described as 15 bases, etc. No new matter is introduced by these amendments.

Rejections under 35 U.S.C. § 112

Claims 6-7 and 10 are rejected under 35 U.S.C. § 112 ¶ 1 as failing to comply with the written description requirement (New matter rejection). These claims have been amended. To the extent that this rejection may still apply to the amended claims, this rejection is respectfully traversed.

Amended claim 6 now recite a composition comprising "an antagonist of hLRTM4 protein, hLRTM4 gene, or hLRTM4 gene transcript, wherein the hLRTM4 protein has a sequence of SEQ ID NO: 2 and the hLRTM4 gene has a sequence of SEQ ID NO: 11, wherein the antagonist is an antibody or a polynucleotide having a fragment of at least 15 bases that hybridize to the hLRTM4 gene or the hLRTM4 gene transcript."

On page 5, lines 25-31, it is described: "The present invention further relates to polynucleotides, which hybridize to the hereinabove-described sequences. As proved in the present invention by experimentations, antisense hLRTM4 can be used to inhibit tumor growth. As herein described, the 'polynucleotide fragments' may have at least 15 bases, preferably at least 30 bases, more preferably at least 50 bases and most preferably at least 100 bases which hybridize to a polynucleotide of the present invention." This description provides a clear support for the amended claims and conveys to one skilled in that art that the inventors, at the time of filing this application, had possession of the invention as claimed. Accordingly, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 102

(A) Claims 6-7 and 10 are rejected under 35 U.S.C. § 102(b) as being anticipated by Monia et al. (US 6,316,259 B1; hereinafter "Monia '259"). Claims 6-7 and 10-11 are amended. To the extent that this rejection may still apply to the amended claims, this rejection is respectfully traversed.

Claim 6 recites a pharmaceutical composition, comprising: "an antagonist of hLRTM4 protein, hLRTM4 gene, or hLRTM4 gene transcript, wherein the hLRTM4 protein has a sequence of SEQ ID NO: 2 and the hLRTM4 gene has a sequence of SEQ ID NO: 1, wherein the antagonist is an antibody or a polynucleotide having a fragment of at least 15 bases that hybridize to the hLRTM4 gene or the hLRTM4 gene transcript."

Monia '259 discloses a nucleotide that includes a segment 606-612 having a sequence identical to a 6-bp segment of SEQ ID NO: 1. Therefore, Monia '259 did not disclose a polynucleotide having a fragment of at least 15 bases that hybridize to the hLRTM4 gene or the hLRTM4 gene transcript, as required by the amended claim 6.

To anticipate a claim, the prior art reference must teach each and every limitation of the claim. Because Monia '259 fails to teach at least one limitation of the amended claim 6, the amended claim 6 and the dependent claims 7, 10-11, and 16-18 should be patentable over Monia '259. Accordingly, withdrawal of this rejection is respectfully requested.

(B) Claims 6-7 and 10 are rejected under 35 U.S.C. § 102(b) as being anticipated by Monia et al. (US 5,962,673; hereinafter "Monia '673"). Claims 6-7 and 10-11 are amended. To the extent that this rejection may still apply to the amended claims, this rejection is respectfully traversed.

Monia '673 teaches an antisense oligomer 18 nucleotides in length wherein nucleotide 3 and 5-18 are complementary to nucleotides 458-471 and 473 of SEQ ID NO: 1. However, Monia '673 did not disclose a polynucleotide having a fragment of at least 15 bases that hybridize to the hLRTM4 gene or the hLRTM4 gene transcript, as required by the amended claim 6.


To anticipate a claim, the prior art reference must teach each and every limitation of the claim. Because Monia '673 fails to teach at least one limitation of the amended claim 6, the amended claim 6 and the dependent claims 7, 10-11, and 16-18 should be patentable over Monia '673. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 17257/005001).

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Respectfully submitted,

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